

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A scanning probe microscope comprising:
a cantilever;
a light-emitting section; and
a light-receiving section,
the light-emitting section comprising a ~~light-emitting~~ light-emitting element and an input waveguide,
wherein the input waveguide irradiates light from the light-emitting section towards the surface of the cantilever at an oblique angle, the light receiving section comprising an output waveguide and a light-receiving element, and the output waveguide receives ~~guides~~ light reflected by the surface ~~towards the light-receiving element~~ of the cantilever at an oblique angle and guides the light towards the light receiving element.
2. (Original) The scanning probe microscope as disclosed in Claim 1, wherein the input waveguide and the output waveguide are both made of optical fiber.
3. (Previously presented) The scanning probe microscope as disclosed in Claim 1, wherein the output waveguide is made of a plurality of optical fibers.
4. (Currently amended) The scanning probe microscope as disclosed in Claim 3, wherein substantially spherical-shaped lenses for focusing light reflected from the cantilever onto the plurality of optical fibers are arranged at the ends of the plurality of optical fibers, and each set of lenses are taken to have substantially flat facing surfaces ~~and be next to~~ adjacent each other.

5. (Previously presented) The scanning probe microscope as disclosed in Claim 1, wherein a tip probe is fitted at an end of the cantilever.

6. (Previously presented) The scanning probe microscope as disclosed in Claim 1, wherein the light-emitting element is a laser diode.

7. (Previously presented) The scanning probe microscope as disclosed in Claim 1, wherein the light-receiving element is a photodiode.

8. (New) The scanning probe microscope as disclosed in Claim 1, wherein the input waveguide and the output waveguide are separated.